Dingo dualisms: Exploring the ambiguous identity of Australian dingoes

Karen F. Hytten

Griffith School of Environment, Griffith University, Nathan, Queensland, 4111, K. Hytten@griffith.edu.au

NBSTRACT

How wildlife is defined, and which wildlife is accorded protection, emerges from competing constructions of nature and culture. Few species of Australian wildlife have as ambiguous an identity as dingoes. This paper identifies three dualisms that characterise discourses relating to Australian dingoes *Canis lupus dingo*. They are at once classified as both a pest and protected species, perceived to be feral and native, and most recently categorised as either pure or hybrid. It is argued that these dualisms are underpinned by different versions of the nature-culture dichotomy. Portrayals and perceptions of dingoes around Australia are explored to reveal how different aspects of the dualisms identified are drawn upon within different contexts. Illustrations of the contradictory constructions of dingoes highlight the need to critically deconstruct discourses relating to wildlife, particularly when they inform actions. As such, this paper demonstrates the important contribution a discourse-sensitive approach can make to understanding human perceptions of wildlife.

Key words: Dingoes, Canis lupus dingo, wildlife, nature and culture, discourse analysis, social construction.

Introduction

As wildlife around the world faces increasing pressures from human activities, it is more important than ever to turn a critical eve upon the interactions between humans and wildlife. Human-wildlife interactions are underpinned by human perceptions of wildlife, which in turn draw upon competing constructions of nature. Nature is a contested term, and nature is constructed in many different ways. Frequently, these constructions reinforce a dichotomy between nature and culture. This paper examines three versions of this dichotomy: nature and culture as discrete classifications, overlapping concepts, and nested categories. A discourse analysis approach is employed to highlight how these models influence the varying constructions of dingoes Canis lupus dingo in Australia. Dingoes have perhaps the most ambiguous identity of any Australian animal. They are simultaneously a declared pest and a protected species, considered to be feral and native, and most recently categorised as either pure or hybrid. Each of these dualisms carries with it implications for human-dingo interactions, casting dingoes in particular roles and validating certain responses to dingoes. For this reason it is important to be aware of the underlying contradictions within these constructions, and this paper argues that it is necessary to critically deconstruct discourses relating to wildlife, particularly when they inform human responses to wildlife.

Methods

Discourse analysis calls for the collection of 'texts', which are then analysed with a view to identifying and characterising discourses, and assessing their influence and effect (Phillips and Hardy 2002). Texts may take a variety of forms, including not only written words, but also spoken dialogue, pictures, symbols, sites and artefacts. While texts are not necessarily meaningful individually, through their

interconnection with other texts they can provide a rich source of qualitative data for analysis (Paltridge 2006). For the purpose of this research, a wide and varied range of texts were collected over several years and at a number of different locations, including the Victorian Alps, and Fraser Island in Queensland. Together, books, newspaper and magazine articles, websites, government publications, and interpretative and regulatory signs, provided insight into the many different ways Australian dingoes are constructed. What became increasingly evident was the extent to which these discourses draw upon competing constructions of nature and culture.

The Social Construction of Nature and Culture

Definitions of nature, and aspects of nature, are continually constructed and reconstructed in different contexts (Mullin 1999). The meanings attributed to nature are myriad and shifting, both between different populations and within them. Nature is simultaneously constructed in utilitarian, aesthetic, pragmatic and symbolic ways (Dove 1992). Different ideas of nature are associated with different contexts and linked to different philosophical traditions (Ellen 1996). Many of the ways in which nature is conceptualised in Western thought, construct a relationship of opposition between nature and culture (Suchet 2002). Nature tends to be seen as separate from humanity; with the boundary between human and nonhuman processes defining what is natural (Milton 2000). Harris (1996) emphasises the antiquity of this dichotomy, suggesting that it dates back to classical times. Suchet (2002) argues that discursive boundaries between nature and culture have become dialectically embedded in mindsets and societies.

^{1.} This paper is in a series on the theme of Animals and Society edited by Carol Freeman and Natalie Edwards for Australian Zoologist.

These boundaries and relationships are negotiable in character and can be conceptualised in terms of several different models. It is important to examine these because the concepts of nature and culture are not just used in a descriptive sense, but also to express and justify particular ways of thinking, judgements, and courses of action (Barry 1999). Particular attention must be paid to the ambiguities and inconsistencies within discourses, in order to determine how particular definitions of nature may serve the interests of particular groups and disempower other groups, other species, or other aspects of the environment (Ellen 1996). The argument is not for an absence or removal of boundaries, or that particular constructions are inferior to others, but rather that it is necessary to expose the context and realisation of power relationships, through examining the way concepts are situated within discourses and underpinned by assumptions (Suchet 2002).

Nature and culture are often conceptualised as two discrete classifications, as depicted in Figure 1. In this model, nature comprises a range of objects and processes that are independent of culture (Gill 1999). Humans are intrinsically valuable cultural subjects and nature is a set of resources or raw material for culture (Bennett and Chaloupka 1993). In this model, things are either natural or cultural but cannot be both. When culture acts upon nature, aspects of nature become cultural and are no longer natural. For example, plants and animals that have been domesticated become part of culture rather than nature.

In a similar, but slightly different model, the world is made up of culture and nature with humans belonging to both (Teich, Porter and Gustafsson 1997). For example, Aitken (2004:1) argues that 'humans have aspects of them that are outside of or antithetical to nature. We are, however, as Darwin showed, naturally evolved beings and to this extent we and nature are overlapping concepts' (emphasis added). In this model, humans occupy a part of nature. As shown in Figure 2, this part of nature is seen to be cultural, but most of nature remains separate from culture. At the same time, humans participate in a cultural world that is external to nature.

The early nineteenth century saw the emergence of another model, in which the notion of culture *and* nature is replaced by that of culture *in* nature (e.g. Humboldt c.1807 in Harris 1996). In this model, culture is a subclass of nature (Ellen 1996), as shown in Figure 3. Humans are seen as part of nature, and therefore subject to constraints. Nature is viewed as *a priori*, having an existence prior to culture (Gill 1999). This view tends to foster a more inclusive and empathetic concern for other aspects of nature, and can be found within conservationist discourses (if in sometimes dated terms) for example:

We are beginning to see that 'nature' and man [sic] are not separate, that each needs the other (Judith Wright cited in Sinclair 1990:12).

Man [sic] is a part of not apart from nature (F. Fraser Darling cited in Michael 2002:2).

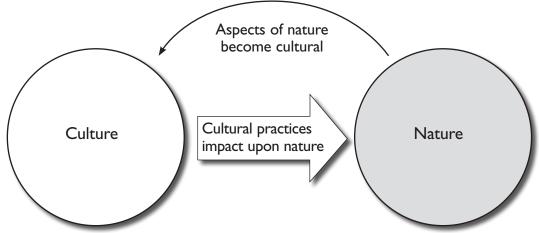


Figure 1: Nature and culture as discrete classifications.

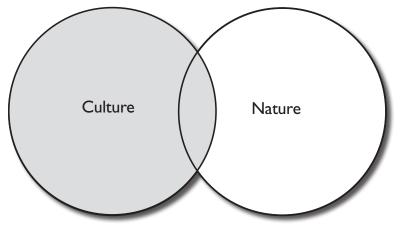


Figure 2. Nature and culture as overlapping concepts.

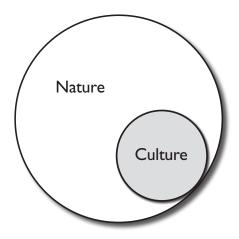


Figure 3. Nature and culture as nested categories.

These models provide a useful framework for considering how humans think about what is 'natural'. Aspects of these three models can be identified within the discourses surrounding Australian dingoes, and in particular the three dingo dualisms identified by this paper.

Dingo Dualisms

Dingoes were first introduced to Australia by Asian seafarers approximately 4000 years ago. They found a niche in Australian ecosystems and spread throughout the continent (Corbett 2001). In many areas, dingoes became incorporated into Aboriginal communities and Aboriginal culture (Meggitt 1965; Newby, Rickard and Palmer 2007). However, this relationship came to an end in most parts of Australia with the expansion of European settlement throughout the nineteenth century (Rogers and Kaplan 2003). As the pastoral industry became established and dingoes began to prey on sheep, bounties were placed on dingoes. Governments have since spent millions of dollars on 'dingo control', building and maintaining the dingo barrier fence and more recently undertaking 1080 aerial baiting programs² (Fleming et al. 2001). The goal of much research into dingoes has been to increase the effectiveness and efficiency of dingo control (e.g. Best et al. 1974; Fleming et al. 2001). More recently however, a growing interest in conserving the species has emerged (e.g. Meek and Shields 2001; O'Neill 2002). A number of authors also explore the different ways in which dingoes are perceived and portrayed, and the implications of these constructions (e.g. Smith 1999; Peace 2001; Hytten and Burns 2007; Parker 2007; Trigger et al. 2008).

As a species, the dingo has a complex and ambiguous identity. It is certainly not the only species to be perceived in dramatically different ways. For example, Bough (2006) examines the history of donkeys in Australia, and how their identity has changed from valued draught animals, to vermin shot in the hundreds of thousands. Similarly, Smith (2006) discusses the many different ways that rabbits



Figure 4. Mature dingoes stand around 57cm at the shoulder and weigh about 15kg, with four main coat colours: ginger, black and tan, white or black (Corbett 2001).

Photo, K. F. Hytten.

have been viewed and treated since their introduction to Australia in 1859. What is particularly interesting about dingoes though, is the extent to which diametrically opposed constructions exist simultaneously. On the one hand, dingoes are protected as a unique species native to Australia, playing an important role in Australian ecosystems, and under threat of extinction through hybridisation with domestic dogs. At the same time, dingoes are a declared pest, perceived to be merely a feral variant of domestic dogs, posing a threat not only to the livelihoods of pastoralists, but also to native wildlife, and therefore in need of extermination, by a variety of means.

These different dingoes tend to be found in different landscapes, obscuring the fact that they are actually exactly the same animal. For urban Australians the former construction is possibly more visible. However, the latter treatment is undoubtedly more widespread, although it often tends to be anonymous, in the sense that it is not clear who is doing what to whom. Figure 5 illustrates this anonymity. The sign depicted was photographed in the Victorian Alps and alerts the public to 1080 poison being used in the area to control 'wild dogs'3. No reference is made to dingoes; they are indiscriminately grouped with wild domestic dogs, and attributed no value as part of the natural environment. The purpose of the sign is to urge people not to let their pets roam, and to warn that interfering with poison is an offence. In 2007 the Victorian State Government reintroduced the bounty system, offering \$50 for dingoes and \$10 for foxes (The Courier Mail 2007). However, this move went largely unreported, and it is virtually impossible to find any reference to it, least of all on the Victorian government's website or in Victorian newspapers⁴.

^{2. 1080 (}sodium monofluroacetate) is an acute metabolic poison. It is particularly toxic to canids but is not selective, and can be lethal to all mammals. It is also used to kill other species, such as the Brushtail possum in New Zealand (Eason, Warburton and Henderson 2000).

^{3.} Under the Victorian Catchment and Land Protection Act 1994 wild dogs are defined as 'feral dogs, dogs-run-wild, and dingoes and their hybrids'.

^{4.} An interrogation of the Factiva Database reveals that no articles about the dingo bounty appeared in 2007 in either *The Age or The Herald Sun*, Victoria's two major daily newspapers.



Figure 5. Warning sign in the Victorian Alps. Photo, K. F. Hytten.

The protected, native and pure dingoes found in national parks have a higher profile. This identity is particularly evident on Fraser Island, where both images and symbols of dingoes are actively exploited by the tourism industry in selling the island to visitors (Peace 2001; Burns 2006). Dingo profiles, and paw prints are utilised in the logos of several tour companies and feature prominently on promotional material, and tourist merchandise. Very different warning signs are found on Fraser Island, as illustrated in Figure 6. This sign not only identifies dingoes by name, but also through the use of an arresting photograph. Its purpose is to alert the public to the presence of dingoes, provide guidelines for avoiding negative interactions, and publicise the penalties for interfering with dingoes. Dingoes have a visible and valued place in this context, although there are a range of expectations they have to meet to maintain this status (Hytten and Burns 2007).

These two texts provide insight into extremely different constructions of dingoes, which draw upon opposing sides of three interesting dualisms: dingoes as pests or a protected species, feral or native, and pure or hybrid. Different combinations of aspects of these dualisms are drawn upon in different contexts, with significant implications for how dingoes are treated.

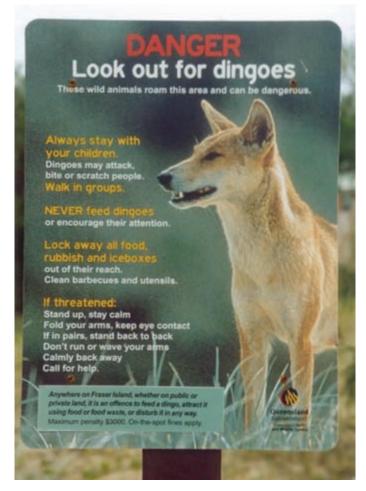


Figure 6. Warning sign on Fraser Island, Queensland. Photo, K. F. Hytten.

Pest or Protected Species

Today dingoes are protected within national parks while simultaneously a declared pest across most of Australia (with the exception of the NT and the ACT). This 'legal schizophrenia' is only relatively recent however, and prior to the 1970s dingoes were almost universally treated as vermin (Davis 2001; Meredith 2004). 'Dingo control' has been undertaken ever since dingoes first came into conflict with early European settlers (Parker 2007). This euphemism is still used to describe the ongoing extermination of dingoes across large areas of Australia.

Dingo control occurs within, and in turn sustains, discourses that cast participants and practices in certain ways. One such discourse is the discourse of bounties and bounty-hunters. A bounty is 'a financial inducement or reward, offered by a government for an act or service, such as the capture of a criminal or outlaw, or the killing of unwanted animals' (Allen 2001:95). In discursive practice, the latter tend to be cast as the former; that is, the 'unwanted animals', in this case dingoes, are constructed as criminals and outlaws. Conversely, bounty hunters are cast as resourceful, even heroic protectors, as for example in a newspaper article entitled 'Marauders outfoxed with dogged determination' (Morely 2004:10). In this text dingo hunters are portrayed as quintessentially Australian with dingoes cast as the intruder

'ripping the heart out of sheep grazing country'. The land owners are innocent and battling victims and the dingoes thieving marauders threatening their livelihood. In the accompanying illustrations, dingo corpses are triumphantly displayed as trophies.

Evident in this discourse, as in other pestilence discourses, is the moral specification of the animals in question (Knight 2000). In particular, dingoes tend to be constructed as cunning, cowardly and cruel. Parker (2007) explores the representation of dingoes in early colonial texts. She argues that because dingoes killed sheep, there was a strong impetus for settlers to cast dingoes as cunning, treacherous, and devious rather than quick-witted, pragmatic, and resourceful (characteristics for which dogs were praised in these texts). The dingo's reputation for cowardice is also long standing, exemplified by a trapper's assertion in 1968 that 'in the outback it is accepted without question that the dingo is a slinking, cowardly animal' (Sid Wright cited in Dickman and Lunney 2001b:96). In an interesting example of reverse-anthropomorphism 'dingo' is found in the Australian lexicon of colourful invective as 'a term of extreme contempt applied to a person, because of the animal's reputation for cowardice and treachery' (Wilkes 1996:122; also Beckett 2000:31).

Although dingoes kill in order to survive, dingoes preying upon stock (particularly sheep) are often constructed as cruel. Quite apart from economic considerations, the pain and suffering inflicted upon stock by dingoes is used in this discourse both to express and evoke concern, revulsion and disgust (e.g. Cathles 2001; Morely 2004). The suffering inflicted by humans on dingoes, or on stock for that matter, is never mentioned. Thus it is not the suffering in itself that is significant, but who is inflicting it upon whom. Dingoes come from outside of culture and interfere with cultural practices, so the pain and suffering that they cause is considered a legitimate part of the discourse. On the other hand, trapping, poisoning or shooting dingoes, or mulesing sheep for example, are part of the culture of agricultural production, and therefore are not generally constructed as distressing. Concern about these issues is emerging however, and were raised by members of the audience at the Symposium on the Dingo held by the Royal Zoological Society of New South Wales in 2001 (Dickman and Lunney 2001a). They are also publicised by animal rights groups such as Animal Liberation Queensland. In contrast to the pestilence discourse in which dingoes are 'dealt with' quickly and humanely, Animal Liberation Queensland contends that 1080 poisoning, causes a 'slow and agonising death', not only killing dingoes but also other wildlife (Animal Liberation 2003).

As well as distinct boundaries defining acceptable behaviours for participants, spatial boundaries also play an important part in this discourse. The oldest and longest of these is the dingo barrier fence. This structure stretches over 5,400km from the Great Australian Bight in South Australia to Dalby in South East Queensland (Meredith

2004). The fence has featured in dingo discourses, and indeed the discourse of outback Australia, for over a century. For example, May (1966:6) declares that:

To stand before [the dingo fence] is to tap part of the national sensibility, to feel the rhythms of the national psyche forged out of two hundred years confrontation with a harsh and unbending land....

It is on 'the clean side' of the fence that dingoes are most vilified. In general, the dingo has had no place here:

'We don't mind the dingo in its rightful place' said no-nonsense grazier Sue Litchfield.... 'We just don't want it on our private land. We think we have a right to run our enterprise without being affected by dogs' (Meredith 2004:106).

Here a grazier articulates her expectations of the landscape and claims her rights in relation to it. In this discourse dingoes do not belong on private land. Rather their 'rightful place' is in national parks. Within national parks, dingoes are constructed in quite a different way and accorded the status of protected species. Here dingoes are attributed value as part of the natural environment and in some places, such as Fraser Island, constitute a tourist attraction (Burns and Howard 2003). It is interesting to note that in conservation agency management documents pertaining to national park management such as the Fraser Island Dingo Management Strategy (EPA 2001) the dingo is referred to as Canis lupus dingo as opposed to Canis familiaris dingo the scientific name used in pest management documents such as Queensland's Land Protection (Pest and Stock Route Management) Regulation 2002⁵. One could be forgiven for thinking that they are in fact two different species altogether.

However, caveats of protection within national parks include that dingoes do not interfere with livestock in adjacent farmlands, or interact with humans within parks themselves. Dingoes that stray too close to the borders of national parks, such as Kosciusko National Park in NSW, may be trapped or poisoned to prevent them leaving the park (Crone 2001). Elsewhere conflict occurs within the boundaries of national parks. For example, negative human-dingo interaction on Fraser Island emerged as a problem in the mid to late 1990s. In order to address this issue the *Fraser Island Dingo Management Strategy* was adopted in 2001. It argues that dingo aggression towards humans occurs as a result of dingoes being attracted to areas occupied by humans by the availability of food, and 'losing their fear of humans' (EPA 2001:4).

This explanation is based on a number of assumptions, among them the expectation that dingoes should stay out of camping grounds and other areas frequented by humans (Hytten and Burns 2007). This expectation can be interpreted in terms of the model of nature and culture as nested categories illustrated in Figure 3. In this context, the national park comprises the 'nature' depicted in the model. Areas frequented by humans are constructed as

^{5.} The scientific name *Canis lupus dingo* was recommended over *Canis familiaris dingo* in 1982 and has been widely, although not universally adopted in accordance with research that suggests that the dingo is a single subspecies of the grey wolf rather than a variant of the domestic dog *Canis familiaris domesticus* (Rogers and Kaplan 2003) or *Canis lupus familiaris* (Corbett 2001).

cultural spaces and appropriated from nature for human occupation and use. Dingoes entering these spaces, or interacting with humans are constructed as behaving unnaturally. Queensland Parks and Wildlife rangers utilise hazing⁶ to deter dingoes from entering camping grounds and picnic areas, but dingoes that persist in frequenting these areas and interacting with humans are shot by rangers, despite their status as a protected species, and in some cases, irregardless of their temperament (Smith and Green 2001; Burns and Howard 2003).

Hytten and Burns (2007) suggest that the claim that dingoes entering campgrounds are behaving unnaturally is flawed, arguing that unless there is a physical barrier delimitating these sites it would seem unrealistic to expect dingoes to remain outside these areas. In this context, a recent management strategy on Fraser Island has been to fence camping grounds and townships. This has been a controversial process, with some arguing that the fences are both ineffective and unsafe (e.g. ABC 2008a; WPSQ 2008). Others contend that the fences have caused more problems than they have solved, by leading to an increase in rodents and snakes in the fenced areas (e.g. Grewal 2009). However, importantly, fencing is consistent with the construction of the 'problem', (that dingoes in close proximity to humans lose their fear of humans and become aggressive). It also reflects management priorities (to reduce human dingo interactions), and facilitates the fulfilment of social expectations (that dingoes should stay away from areas frequented by humans) (Hytten and Burns 2007). Thus while generally constructed as a way to protect visitors to Fraser Island from dingoes, the fences could arguably be interpreted as a way of protecting the dingoes from the unrealistic expectations imposed upon them.

Native or Feral

The debate as to whether dingoes are native to Australia has been widely contested for many years⁷. A common usage of the term classifies any animals here before European settlement as native, which makes dingoes native. This was not a complimentary label for the first century and a half of European settlement, when most native plants and animals were disliked in favour of European species. Indeed, during the mid to late 1800s 'acclimatisation societies' around the country actively promoted the release of European plants and animals into the Australian environment. However, this preference has gradually undergone a distinct reversal with a new predilection for native wild animals and aversion to for those that have been introduced and become wild (Smith 1999). Today, conserving native species is a central tenet of conservationism (Milton 2000). As such, the question of whether dingoes are native has come under closer scrutiny (e.g. Trigger et al. 2008).

Many argue that the dingo is *not* native. For example, Koler-Matznick (2002:5) clearly states: 'Dingoes are feral dogs, found in Australia. They are called feral because they are not native to Australia'. In his book Feral Future, Tim Low presents a similar view, referring to dingoes as 'feral dogs [that] have been slaughtering our wildlife marsupials, birds and reptiles - for thousands of years. (Low 2001:12). Clearly Low does not consider dingoes to be Australian wildlife, and his use of the emotive verb slaughter, resonates with the construction of dingoes as cruel discussed earlier. The use of the word feral in these texts is interesting. The term is defined in three ways: first, as 'having escaped from domestication and become wild', second, as 'not domesticated or cultivated' and third, as 'savage or suggestive of a wild beast' (Allen 2001:318). Given that it is believed that the dingo was never domesticated⁸, the first definition is not applicable, and neither the second nor third support any distinction between dingoes and other Australian wildlife.

Some insight into the issue is provided by Menkhorst and Knight's Field Guide to the Mammals of Australia which places dingoes in the section entitled 'Introduced Carnivores', directly between the Red Fox and the House Cat (Menkhorst and Knight 2001). The fact that dingoes have inhabited Australia for up to 4000 years, as opposed to foxes and cats that have been in Australia for only 200 years, is of seemingly no significance in this discourse. The salient point seems to be that dingoes were introduced; that is, they came to Australia with humans. This is reiterated by a report compiled for the Australia Government's Department of Environment and Heritage on introduced mammals on Western Australian Islands which classifies the dingo as a feral animal because they were 'taken on to islands by Aborigines within the last 4000 years' (Burbidge 2004:3). Indeed Low further clarifies his position, stating that in his view 'the dingo is exotic because, irrespective of when it arrived, it was brought here by people' (Low 2001:257). The implications of these views can be interpreted in terms of the model of nature and culture as discrete classifications illustrated in Figure 1. Under this model, the role played by humans in bringing dingoes to Australia makes them cultural artefacts, which reduces their authenticity as part of nature.

The classification of dingoes as feral has significant implications for responses to dingoes. Under legislation in every state, land owners are required to 'control' feral plants and animals including dingoes. Detailed guidelines are provided for how land owners need to either shoot, trap or poison dingoes in order to reduce the number of dingoes on their properties (e.g. State of Queensland 2005; State of Victoria 2007). Thus the feral discourse directly feeds into and reinforces the pestilence discourse discussed earlier, and is used to support the

^{6.} Hazing is defined as 'harassing dingoes by way of irritation' through the use of non-lethal projectile weapons (e.g. 'ratshot' via a .22 calibre rifle, various crowd control projectiles fired from 12 gauge shotguns, rubber or clay pellets with slingshots), and spray bottles containing offensive or irritating contents (EPA 2001:11).

^{7.} As early as 1863, John Gould deliberated over whether dingoes were native Australian animals (Dickman and Lunney 2001b).

^{8.} While Aborigines undoubtedly *tamed* dingoes, it is believed that they did not *domesticate* them. That is, they did not alter their genetic makeup by selective breeding (Corbett 2001).

position that dingoes should be exterminated, not only to protect livestock, but in some cases also Australian wildlife. In this context the feral discourse is used to call into question the protected status of dingoes in national parks. Because dingoes are not 'naturally' occurring they have no place in national parks and there have been calls for their removal from national parks altogether, with the senior curator of mammals at the Queensland Museum, Steve Van Dyck, asserting that 'Australia's so called native dog isn't native at all' and suggesting that dingoes should be sent back 'where they came from...'9(cited in Roberts 2002:13, also see Low 2002).

For others these suggestions are absurd. They argue that after 4000 years, the dingo is well and truly native, in that it belongs in Australia (e.g. Reardon 1992; Corbett 1995). There is a growing recognition that since their arrival, and the extinction of the Thylacine on mainland Australia, dingoes have occupied a significant ecological niche as a major predator. They have important relationships with a large number of species in a wide range of different habitats (Corbett 2001). The utilitarian value of dingoes has also been recognised. Dingoes kill large numbers of rabbits, as well as preventing kangaroos from overpopulating cleared land (Dickman and Lunney 2001b; Trigger et al. 2008). Finally, there is a new concern for the intrinsic value of dingoes (e.g. Meredith 2004). However, dingoes are subject to losing this status as native animals worthy of protection, when they interbreed with domestic dogs.

Hybrid or Pure

Despite the morphological and behavioural differences between dingoes and domestic dogs¹⁰, they are the same species and there is no biological impediment to their interbreeding. Since the introduction of domestic dogs by European settlers, 'hybridisation' has occurred through dingoes breeding with domestic dogs. Some scientists believe that this process is expedited by dingo control practices which tend to break down otherwise tight-knit dingo social structures that inhibit interbreeding (Eldridge 2003). Others argue that the trend for keeping dingoes as pets has led to increased hybridisation by increasing the contact between dingoes and domestic dogs (Fleming et al. 2001). It is estimated that more than half of the wild dogs in southern and eastern Australia are now 'hybrids' (Rogers and Kaplan 2003). The discourse of hybridisation expresses growing concern about the ramifications of this:

The pure dingo gene pool is being swamped... and unless there is a radical change in people's attitudes the extinction of pure dingoes seems inevitable (Corbett 2001:7).

Rather than being the outcome of the actions and interactions of individual dingoes and dogs, here hybridisation is constructed as a *phenomenon* that is

suddenly and inevitably overwhelming a passive and abstract subject (the pure dingo gene pool). This process has significant implications for the construction of dingoes, as evident in this extract from an article in the *Sydney Morning Herald*:

Purebred dingoes may no longer exist, DNA testing has revealed. The tests have fuelled debate over whether the dingo is truly a wild dog, the top-order predator in the Australian bush, a native animal deserving protection or merely a mongrel variant of the domestic dog, a pest which should be eradicated (Roberts 2002:13).

In this text, the dingo's status as a native animal deserving of protection hinges upon its genetic purity. Dingoes are seen to be 'contaminated' through their contact with domestic dogs (e.g. Wilton 2001; Corbett 2001). Just as dingoes are considered to be out of place on farms, domestic dogs do not belong in the bush, and interbreeding between dingoes and domestic dogs is inappropriate. Dingo-hybrids are almost always grouped with wild domestic dogs and attributed no value as dingoes (e.g. Wilton 2001). This attitude can be conceptualised in terms of the model of nature and culture as overlapping concepts, illustrated in Figure 2. Domestic dogs are situated within culture and dingoes within nature. Hybrids occupy the overlapping space between culture and nature and together with domestic dogs are not considered to have a legitimate place in nature.

Thus the desire to conserve the 'purity' of dingoes can be seen as part of the discourse policing artificial boundaries in order to preserve what is perceived to be natural. This is rationalised as part of the commitment to conserving biodiversity, a primary objective of conservation. The loss of species amounts to a reduction in biodiversity, so much conservation effort is aimed at preventing this (Milton 2000). Since dingoes and domestic dogs can be distinguished from one another visually, and also differ genetically, the boundary between them is seen to constitute biodiversity, and is thus considered worth maintaining.

Distinguishing the dingoes and dingo-hybrids is more problematic. Patchy, brindle and sable coats are thought to indicate hybrids. However, hybrids can also have the same coloured coats as 'pure' dingoes, making it impossible to differentiate between them visually. Until recently, the only way of ascertaining whether a dingo was pure, was by measuring certain dimensions of its skull, a procedure only possible on dead dingoes (see Corbett 2001). Methods for detecting the purity of dingoes by DNA testing have since been developed (outlined by Wilton 2001). However, efficient field testing may not be available for up to 20 years (Dickman and Lunney 2001b:91) so this is of little practical application for the present.

It is suggested that as bigger, more aggressive dogs, hybrids:

^{9.} Smith (1999:289) observes an interesting metaphorical parallel between these sorts of remarks and the anti-immigration sentiments articulated by the One Nation party during the late 1990s.

^{10.} Dingoes produce only one litter of pups each year, in contrast to domestic dogs which can produce two, and unlike dogs, dingoes do not bark (Rogers and Kaplan 2003).

... pose a real menace to Australian wildlife and livestock... they will attack, maul and savage livestock without feeding on it... whereas dingoes will eat young livestock, if they have access to them, but... prefer their normal diet of kangaroo and other native fare and will take these, even in preference to calves that are much easier to take (Rogers and Kaplan 2003:186-7).

Attributing undesirable behaviors to hybrids alone seems perhaps optimistic and is probably unrealistic. Likewise, suggesting that dingoes 'prefer their 'normal diet' of kangaroo and other native fare' to calves or sheep would appear to be a romantic interpretation of dingoes, that seeks perhaps to construct pure dingoes as benign and inoffensive and therefore acceptable as natural. Some argue that the boundary between dingoes and dingo-hybrids is not significant outside of science, as it is defined by criteria which are clearly of no consequence to the dingoes, and hybrids can equally well fulfil the ecosystem functions that dingoes have performed for thousands for years (Davidson 2004; Meredith 2004). Rather, it would seem that conservationists are simply seeking to preserve their own categories and constructs (Lawson 1996; Milton 2000).

In some instances however, the fact that dingoes are deemed to be genetically endangered by hybridisation, may be the catalyst for changing legislation to ensure their protection. In late 2007 the Victorian State Government's scientific advisory committee recommended that the dingo should be listed as a threatened species under the Flora and Fauna Guarantee Act (Edwards 2007). In October 2008, the Victorian Government moved to declare the dingo a protected species, and develop an action plan to promote dingo conservation. Once again it would appear that the dingo's claim to protection is tenuous though. Despite recognizing that there could be fewer than 100 pure dingoes left in Victoria, the State Environment Minister, Gavin Jennings, sought to assure farmers that the plan would not 'interfere with ground baiting being used to control wild dogs' or 'prevent farmers from shooting dingoes if they enter their property', declaring that dingoes 'are subjected to the same rules that apply to wild dogs and hybrid dogs

that may attack livestock' (Jennings cited in ABC 2008b). Indeed farmers use the process of hybridisation as further justification for continuing to kill dingoes, stressing the fact that few dingoes in the wild are pure (e.g. Edwards 2007). While obviously these statements are motivated by political and economic considerations, the ambiguity surrounding the identity of dingoes appears to contribute to the ongoing ambiguity inherent in responses to dingoes.

Conclusion

Aspects of the three dualisms discussed are drawn upon in different contexts to construct very different dingoes and inform very different responses to dingoes. Discourses cast participants and practices in different ways depending upon their position in relation to nature and culture. Because dingoes come from outside of culture and interfere with cultural activities they are subject to moral specification. Attributes of dingoes are mobilized in support of this construction, and in turn the construction mobilized in support of dingo control practices. Spatial boundaries also play an important role in these dualisms. Within national parks dingoes assume a completely different identity both legally and discursively. Here dingoes are protected, and accorded value as part of the natural environment. However, in order to retain this protection it is necessary for dingoes to fulfil expectations about what constitutes natural behavior, including where dingoes should be. Because there are generally no physical barriers delineating these spaces, any dingo's claim to this identity is tenuous. More generally, dingoes are at risk of losing their status as native wildlife altogether as a result of hybridisation. At the same time, there is a growing recognition that hybridisation may lead to the extinction of dingoes. This, together with a better understanding of the important role dingoes play in Australian ecosystems, has given rise to new efforts to promote dingo conservation. Because these constructions have implications for human-dingo interactions, and indeed perhaps the survival of the dingo as a unique sub-species, it is important to be aware of their underlying contradictions, and necessary to critically deconstruct discourses relating to wildlife, particularly when they inform actions.

References

ABC (Australian Broadcasting Commission). 2008a. Fraser Island dingo fence completed. ABC News Online. 24 October 2008.

ABC (Australian Broadcasting Commission). 2008b. Dingo protected in Victorian Alpine region. ABC News Online. 24 October 2008.

Aitken, G. 2004. A New Approach to Conservation: The Importance of the Individual through Wildlife Rehabilitation. Ashgate Publishing Limited, Aldershot.

Allen, R. (ed) 2001. The Penguin English Dictionary. Penguin Books, London.

Animal Liberation Queensland 2003. Animal Liberation Queensland. [Pamphlet] Animal Liberation Queensland, Brisbane.

Barry, J. 1999. Environment and Social Theory. Routledge, London.

Beckett, R. 2000. The New Dinkum Aussie Dictionary. New Holland Publishers, Sydney.

Bennett, J. and Chaloupka, W. 1993. The Nature of Things: Language, Politics, and the Environment. University of Minnesota Press, Minneapolis.

Best, L.W., Corbett, L.K., Stephens, D.R. and Newsome, A.E. 1974. Baiting trials for dingoes in central Australia, with poison '1080' encapsulated strychnine, and strychnine suspended in methyl cellulose. CSIRO Division of Wildlife Research Technical Paper. 30:1-7.

Bough, J. 2006. From value to vermin: a history of the donkey in Australia. Australian Zoologist. 33(3):388-397.

- **Burbidge, A.A. 2004** Introduced Mammals on Western Australian Islands: Improving Australia's Ability to Protect its Island Habitats from Feral Animals. Final Report for the Australian Government, Department of Environment and Heritage.
- **Burns, G.L. 2006.** The fascination of fur and feathers: managing human-animal interactions in wildlife tourism settings. *Australian Zoologist.* 33(4):446-457.
- Burns, G.L. and Howard, P. 2003. When wildlife tourism goes wrong: a case study of stakeholder and management issues regarding Dingoes on Fraser Island, Australia. *Tourism Management*. 24:699-712.
- Cathles, E. 2001. A landowners perspective. Pp 75-83 in Symposium on the Dingo, edited by C.R. Dickman and D. Lunney. Royal Zoological Society of New South Wales, Mosman, NSW, Australia.
- Corbett, L. 1995. Dingoes: expatriate wolves or native dogs? *Nature Australia*. 25(3):46-55.
- Corbett, L. 2001. The Dingo in Australia and Asia. JB Books, Adelaide.
- **Crone, J. 2001.** Dingo Hunters. *Southern Exposure.* Vol. 2. [Video Recording] ABC Videos, Sydney.
- Davidson, S. 2004. The great dingo dilution. ECOS. 118:10-17
- Davis, E. 2001. Legislative issues relating to control of dingoes and other wild dogs in New South Wales I: approaches to future management. Pp 39-41 in *Symposium on the Dingo*, edited by C.R. Dickman and D. Lunney. Royal Zoological Society of New South Wales, Mosman, NSW, Australia.
- **Dickman, C. R. and Lunney, D. 2001a.** Plenary: A session of questions and answers. Pp 98-94 in *Symposium on the Dingo*, edited by C.R. Dickman and D. Lunney. Royal Zoological Society of New South Wales, Mosman, NSW, Australia.
- Dickman, C.R. and Lunney, D. 2001b. Last howl of the dingo: the legislation, ecological and practical issues arising from the kill-or-conserve dilemma. Pp 95-107 in *Symposium on the Dingo*, edited by C.R. Dickman and D. Lunney. Royal Zoological Society of New South Wales, Mosman, NSW, Australia.
- **Dove, M.R. 1992.** The dialectical history of 'jungle' in Pakistan: an examination of the relationship between nature and culture. *Journal of Anthropological Research.* 48(3):231-253.
- Eason, C., Warburton, B. and Henderson, R. 2000. Toxicants used for possum control. In *The Brushtail Possum: Biology, Impact and Management of an Introduced Marsupial*, edited by T.L. Montague. Manaaki Whenua Press, Lincoln, New Zealand.
- Edwards, L. 2007. Farmers oppose dingo protection. *The Age.* 8 August 2007.
- **Eldridge, S. 2003.** Intact dingo pack works in your favor. *Savanna Link.* 24:12. Available from: http://savanna.cdu.edu.au/savanna_web/publications/downloads/savlinks24.pdf.
- Ellen, R. 1996. Introduction. In Redefining Nature: Ecology, Culture and Domestication, edited R. Ellen and K. Berg, Oxford.
- EPA (Environmental Protection Agency) 2001. Fraser Island Dingo Management Strategy. Conservation Management Report. Queensland Parks and Wildlife Service, Brisbane.
- Fleming, P., Corbett, L., Harden, R. and Thomson, P. 2001. *Managing the Impacts of Dingoes and Other Wild Dogs.* Bureau of Rural Sciences, Kingston.
- Gill, N. 1999. The ambiguities of wilderness. In *Australian Cultural Geographies*, edited by E. Straford. Oxford University Press, South Melbourne.

- **Grewal, J. 2009.** Pure bred dingoes face extinction. *Fraser Coast Chronicle.* 6 March 2009.
- Harris, D. R. 1996. Domesticatory relationships of people, plants and animals. In *Redefining Nature: Ecology, Culture and Domestication*, edited R. Ellen and K. Berg, Oxford.
- Hytten, K.F. and Burns, G.L. 2007. Deconstructing dingo management on Fraser Island, Queensland: the significance of social constructionism for effective wildlife management. Australasian Journal of Environmental Management. 14:48-57.
- **Knight, J. 2000.** Introduction. In *Natural Enemies: People-Wildlife Conflicts in Anthropological Perspective*, edited by J. Knight. Routledge, London.
- Koler-Matznick, J. 2002. The Dingo. Rosen Publications, Sydney.
- Lawson, T. 1996. Brent Duck. Ecos: A Review of Conservation. 17(2):27-35.
- Low, T. 2001. Feral Future: The Untold Story of Australia's Exotic Invaders. Penguin Books, Ringwood.
- Low, T. 2002. The New Nature: Winners and Losers in Wild Australia. Viking, Camberwell.
- May, B. 1986. The Great Dingo Fence, and other Australian Oddities. Saint George Books, Perth.
- Meek, P.D. and Shields, J. 2001. Positive dingo management: how not to throw out the baby with the bath water. Pp 65-74 in Symposium on the Dingo, edited by C.R. Dickman and D. Lunney. Royal Zoological Society of New South Wales, Mosman, NSW, Australia
- Meggitt, M.J. 1965. The Association between Australian Aborigines and Dingoes. In Man, Culture and Animals: The Role of Animals in Human Ecological Adjustment, edited by A. Leeds and A. Vayda. The American Association for the Advancement of Science, Washington DC.
- Menkhorst, P.W. and Knight, F. 2001. A Field Guide to the Mammals of Australia. Oxford University Press, Melbourne.
- Meredith, P. 2004. Bye bye dingo. Australian Geographic. 74:104-109.
- Michael M.A. 2000. Preserving Wildlife: An International Perspective. Humanity Books, New York.
- Milton, K. 2000. Ducks out of water: nature conservation as boundary maintenance. In *Natural Enemies: People-Wildlife Conflicts in Anthropological Perspective*, edited by J. Knight. Routledge, London.
- Morley, P. 2004. Marauders outfoxed with dogged determination. *The Courier Mail.* 28 August, 2004.
- Mullin, M.H. 1999. Mirrors and windows: sociological studies of human-animal relationships. *Annual Review of Anthropology*, 28:201-24.
- Newby, J., Rickard, P. and Palmer, J. 2001. The secret history of the dingo. *The Science Show.* Radio National. Broadcast 16 June 2007 by the Australian Broadcasting Commission. Transcript available from: http://www.abc.net.au/rn/scienceshow/stories/2007/1952216.htm.
- O'Neill, A. 2002. Living With the Dingo. Envirobook, Armadale.
- Paltridge, B. 2006. Discourse Analysis: An Introduction. Continuum, London.
- Parker, M. 2007. The cunning dingo. Society and Animals. 15:69-78.

Peace, A. 2001. Dingo discourse: constructions of nature and contradictions of capital in an Australian eco-tourist location. *Anthropological Forum.* 11(2):175-194.

Phillips, N. and Hardy, C. 2002. Discourse Analysis: Investigating Processes of Social Construction. Sage, London.

Reardon, M. 1992. Dingo: resourceful hunter with an image problem. *Australian Geographic*. 27:84-99.

Roberts, G. 2002. Going to the dogs: DNA evidence is damming the dingo's future. Sydney Morning Herald. 31 August, 2002.

Rogers, L.J. and Kaplan, G. 2003. Spirit of the Wild Dog: The World of Wolves, Jackals and Dingoes. Allen and Unwin, Crows Nest.

Sinclair, J. 1990. Fraser Island and Cooloola. Willoughby: Weldon.

Smith, N. 1999. The howl and the pussy: feral cats and wild dogs in the Australian imagination. *The Australian Journal of Anthropology*. 10(3):288-305.

Smith, N. 2006. Thank your mother for the rabbits: bilbies, bunnies and redemptive ecology. *Australian Zoologist.* 33(3):369-378.

Smith, W. and Green, G. 2001. Top ranger brought in for the cull. The Courier Mail. 5 May 2001.

Suchet, S. 2002. 'Totally wild'? Colonising discourses, indigenous knowledges and managing wildlife. Australian Geographer. 3(2):141-157.

Teich, M., Porter, R. and Gustafsson, B. 1997. Nature and Society in Historical Context. Cambridge University Press, Cambridge.

The Courier Mail. 2007. Qld call for dingo bounty. *The Courier Mail.* 1 April 2007.

Trigger, D., Mulcock, J., Gaynor, A. and Toussaint, Y. 2008. Ecological restoration, cultural preferences and the negotiation of 'nativeness' in Australia. *Geoforum.* 39:1273-1283.

Wilkes, G.A. 1996. A Dictionary of Australian Colloquialisms. 4th Edition. Oxford University Press, Melbourne.

Wilton, A.N. 2001. DNA methods for assessing dingo purity. Pp 49-56 in *Symposium on the Dingo*, edited by C.R. Dickman and D. Lunney. Royal Zoological Society of New South Wales, Mosman, NSW, Australia.

WPSQ (Wildlife Preservation Society of Queensland) 2008. Fraser Island dingo fence controversy. Wildlife Queensland News. 194:7.